

DOCUMENT RESUME

ED 445 857

RC 022 642

AUTHOR Hughes, Mary F.
TITLE Financing Facilities in Rural School Districts: Variations among the States and the Case of Arkansas.
PUB DATE 2000-00-00
NOTE 20p.; Chapter 2 in: Improving Rural School Facilities: Design, Construction, Finance, and Public Support; see RC 022 640.
PUB TYPE Reports - Research (143)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Educational Equity (Finance); *Educational Facilities Improvement; Elementary Secondary Education; *Financial Problems; Low Income Counties; *Rural Schools; *School District Size; *School District Wealth; *School Districts; State School District Relationship
IDENTIFIERS *Arkansas

ABSTRACT

This chapter examines the main challenges that rural school districts face in school facilities funding and illustrates these problems with a case study of Arkansas. Most rural school districts serve only a small number of students, which tends to limit the funds available for construction or renovation. In addition, rural districts are likely to have lower assessed property values and lower resident ability to support local taxes. In Arkansas, the per-student amount that a district could borrow for school facilities funding was three times larger for the state's largest school district than the smallest school district. The smallest district had 78 percent of its students participating in the free and reduced lunch program, an indication of resident inability to support additional taxes. The total borrowing power of districts ranged from \$531,000 to \$363 million. When facilities funding is based on local property wealth and local ability to pay, great inequities occur. In 1994, 15 states provided no state school facilities funding, and 8 of those states measured local fiscal capacity by assessed property valuations. Either state or federal aid would help remedy inequities in facilities funding. Six data tables provide details on the states' facilities funding and classification of local fiscal capacity and on Arkansas districts' borrowing power by size, rurality, and poverty rate. (SV)

M. Slack

CHAPTER 2

Financing Facilities in Rural School Districts: Variations among the States and the Case of Arkansas

MARY F. HUGHES

In the famous 1954 Supreme Court case *Brown v. Board of Education of Topeka*, Chief Justice Warren stated that "education is perhaps the most important function of state and local governments, and . . . must be made available to all on equal terms." In 1971, W. Monfort Barr and K. Forbis Jordan pointed out that even though the titles for school buildings may legally reside with the state, and education has historically and legally been considered a state function, a major portion of the financial burden for providing housing for educational programs and students had been placed upon the shoulders of the local school districts.¹

Today, we know that education is still one of the most important legal functions of state government. We also know that a major portion of the responsibility for funding school facilities remains at the local level and that the quality of school buildings is not equal across most states.

The major question of this chapter is: How are rural school facilities financed? The answer is neither simple nor easy to discern. In most states, school facilities funding has been tied to the ability of the local school district to raise funds from local assessed property values,

ED 445 857

KC 022642

which introduces the problem of equity. School districts with a higher assessed value of property will have greater ability to raise funds with equal or less tax effort than school districts with lower assessed property values. Many poor school districts have little or no available funding for school facilities when the avenue to raise funds is tied to their local wealth.

This chapter presents a brief literature review of school facilities funding issues in the United States and presents a case study of rural school facilities funding issues in the state of Arkansas. Many of the challenges faced by rural districts in Arkansas are shared by rural districts across the nation. The findings in this study raise questions and concerns regarding funding issues in other states. Finally, this chapter will present some conclusions and recommendations for more equitable rural school financing.

Financing School Facilities

According to Roe L. Johns, Edgar L. Morphet, and Kern Alexander, prior to the twentieth century, local governments were totally responsible for financing public school facilities in the United States. Writing in the early 1980s, they explained that local school districts in most states continued to bear the major responsibility with relatively few options available for obtaining funds to finance school facilities construction. They identified nine options: (1) "pay-as-you-go," or the ability to finance construction from current revenues; (2) reserve funds, or the accumulation of tax funds in a separate account for future buildings; (3) general obligation bonds; (4) full state support; (5) state equalization grants-in-aid; (6) state percentage-matching grants-in-aid; (7) state flat grants-in-aid; (8) state loans; and (9) state school building authorities.² Johns and colleagues noted that the problems identified in a 1971 National Educational Finance Project survey continued to exist in large part in 1980:

In any general discussion of aid for public school construction throughout the nation, two paramount problems emerge: (1) many state-aid plans are only token in nature, and several states do not provide local school districts with any financial assistance for school construction; and (2) the federal government has not provided financial support for any general programs for school construction.³

Johns and colleagues found this to be problematic because in many parts of the nation school systems could not provide suitable funding for facilities through local resources.⁴

The tradition of local responsibility for financing school sites, buildings, equipment, and other capital costs is still strongly entrenched in many states. According to more recent research, 15 states provided no funding for school facilities in 1993-1994, which forced the school districts in those states to rely on their local property wealth for facilities funding. Other states provided very minimal funding. For example, Nebraska provided less than \$1 million in 1993-94. Thirty-seven states provided some state funding for capital projects, including states that address capital outlay through their basic support program. During the 1993-94 school year, state funding programs for capital outlay included full state funding in Hawaii, flat grants in Indiana and South Carolina, percentage equalizing in Massachusetts with state funds ranging from 50 to 90 percent of the projects, 60 percent of approved project costs paid by the state of Maryland with proportional local funding rated on the district's wealth class, and funding provided through the School Building Authority in West Virginia. In summary, in 1993-94, some of the states provided equalized aid for school facilities, some provided flat grants, several provided funds in the basic funding formula, and some provided nonequalized aid.⁵

Table 2.1 presents an overview of capital outlay and debt service programs provided by the states. Capital outlay is defined as expenditures that result in the acquisition of or addition to fixed assets such as land, buildings, and equipment. Debt service programs include the revenue to pay the principal and interest on long-term debt (more than one year).

School District Wealth and Ability to Pay

As mentioned earlier, the ability of a school district to fund school buildings at the local level is directly related to the local fiscal resources available to that district. In most states the only fiscal resource available to school districts is the property tax. Therefore, the most commonly used measure of a district's ability to fund local

Table 2.1
Capital Outlay and Debt Service Programs, 1993-94

No State Funding	State Funding Percentage Equalized	State Funding *Special Formula or Flat Grant	State Funding Basic Funding Formula	State Funding Percent of Debt Service	State Funding State Leases	State Funding School Building Authority	Full State Funding
Arkansas	Connecticut	Florida	Alabama	Alaska	California	West Virginia	Hawaii
Idaho	Delaware	Indiana*	Arizona	New Hampshire			
Illinois	Georgia	Maine	Colorado	Ohio			
Iowa	Maryland	Minnesota	Kansas				
Louisiana	Massachusetts	Mississippi	Kentucky				
Michigan	New York	Nebraska	Tennessee				
Missouri	Pennsylvania	New Jersey	Texas				
Montana	Rhode Island	New Mexico	Wisconsin				
Nevada	Washington	South Carolina*					
N. Dakota		Utah					
Oklahoma		Vermont					
Oregon							
S. Dakota							
Virginia							
Wyoming							
Total: 15	Total: 9	Total: 11	Total: 8	Total: 4	Total: 1	Total: 1	Total: 1

Source: Steven D. Gold, David W. Smith, and Stephen B. Lawton, eds., *Public School Finance Programs of the United States and Canada, 1993-94*, vol. 1, (Albany, NY: Center for the Study of the States, 1995), 48-52.

Reprinted with permission.

school facilities is that district's equalized assessed property valuation, upon which the property tax is based. Some school districts in some states have access to other revenue sources in addition to the property tax, including local income tax, local sales tax, vehicle excise tax, and user fees.⁶

Many researchers suggest that local fiscal capacity should be measured by local income, rather than the local equalized assessed property valuation, because there is a low correlation between property values and resident income. Some school districts have high assessed valuation of property and therefore a high property tax capacity but low incomes and thus a low resident fiscal ability to pay taxes. In these instances, limiting the measure of fiscal capacity to just property produces an inaccurate picture of the overall fiscal ability of the local residents to support education. These researchers have argued that there is a need to combine the two measures to arrive at a more comprehensive measure of fiscal capacity.⁷

Table 2.2 provides an overview of the different ways states measure local fiscal capacity. The information in Table 2.2 demonstrates the large number of states that use assessed property valuation both for measuring local wealth and for generating local school district revenue. Eight of the 15 states that did not provide state aid for school facilities funding in 1993-94 measured fiscal capacity only by assessed property valuation, upon which property tax is based. Those states were Arkansas, Idaho, Illinois, Iowa, Michigan, Montana, North Dakota, and Oklahoma.

School Facilities Funding in Arkansas

To provide a better understanding of financing issues facing rural schools, the balance of this chapter focuses on funding issues in the state of Arkansas. A highly rural state, Arkansas provides an interesting example of some of the funding challenges faced by rural districts. Many of the findings in this study apply to other states and highlight some of the problems faced by rural districts across the nation. In 1993-94, Arkansas was one of 15 states that did not provide substantial state aid for school facilities funding and was one of eight states that measured fiscal capacity by assessed property valuation only. In the 1997-98 school year, Arkansas provided \$10 million for general facilities funding for 312 school districts housing approximately 400,000

Table 2.2
Classification of 1993-94 Basic Support
Local Fiscal Capacity/Wealth Measures

Assessed Property Valuation (only)	Assessed Property Valuation & Other Revenue Sources (Not Including Personal Income)	Assessed Property Valuation & Personal Income	Assessed Property Valuation & Personal Income, Plus Other Revenue Sources
Arizona	Alaska	Connecticut	Alabama
Arkansas	Indiana	Maryland	Missouri
California	Louisiana	Massachusetts	Nebraska
Colorado	Mississippi	New Hampshire	Tennessee
Delaware	Nevada	New Jersey	Virginia
Florida	New Mexico	New York	
Georgia	Oregon	Pennsylvania	
Idaho	South Dakota	Rhode Island	
Illinois	Wyoming	Vermont	
Iowa			
Kansas			
Kentucky			
Maine			
Michigan			
Minnesota			
Montana			
North Dakota			
Ohio			
Oklahoma			
South Carolina			
Texas			
Utah			
West Virginia			
Wisconsin			
Total = 24	Total = 9	Total = 9	Total = 5

States not included in Table 2: Hawaii, North Carolina, and Washington. North Carolina and Washington do not use a measure of local fiscal capacity in the distribution of basic support aid. The following states provided descriptions for school years other than 1993-94: Colorado—1994-95, Michigan—1994-95, and Wyoming—1992-93.

Source: Source: Steven D. Gold, David W. Smith, and Stephen B. Lawton, eds., *Public School Finance Programs of the United States and Canada, 1993-94*, vol. 1, (Albany, NY: Center for the Study of the States, 1995), 48-52.

Reprinted with permission.

students. This equates to \$25 per student for state aid for facilities funding.

The Condition and Cost of School Buildings in Arkansas

In 1995, Arkansas had 3,101 school buildings of which 2,662 were permanent buildings in use and about 300 were temporary buildings. Ten percent (301) of the buildings were built before 1946 and thus were more than 50 years old. In 364 of the buildings, occupancy was greater than capacity. In 100 of the buildings, the roofs needed to be replaced. The construction cost per square foot for a regular classroom in 1995 was \$38.42. For specialty areas including the site, labs, media center, gym, and auditorium, the cost was \$65.47 per square foot. The 1995 cost of the total school facility and site was \$49.12 per square foot.⁸

The Arkansas Department of Education reported in 1996 that during a typical school year, plans for approximately 100 school construction projects were submitted to the office of School Plant Services for approval. The department pointed out that the plans were equally divided among construction of an entire building, additions to existing facilities, and renovation projects. The major trend in both new construction and renovation projects was providing facilities for middle school instruction units. Arkansas schools were also working hard to provide state-of-the-art technology and had achieved a ratio of eight students to one computer.⁹

Differences among School Buildings and Facilities Funding in Three School Districts

By comparing three public school buildings located in three different school districts within the same county in Arkansas, we can gain an understanding of the funding inequities that can occur across rural and urban areas in a state. We will also look at the school districts' demographic and school facilities funding data.

School Building 1 is a new \$8 million middle school that has 126,000 square feet of usable space for 1,050 sixth and seventh graders. The new building sits on 30 acres of donated land that has a value of over \$500,000. The cost to build the middle school was about \$63 per square foot, which included \$300,000 for terrazzo floors. Many individuals have indicated that this is one of the most beautiful

and efficient school facilities they have ever toured and that it is an example of what public schools of the new millennium could offer. This school features state-of-the-art school architecture, equipment, and design, with 145 computers; 90 microscopes; a media center; band, chorus, and art rooms; a gymnasium; and a cafeteria with a stage. It is located in a school district that had a K-12 enrollment of 8,867 in 1993-94 and a 23-percent free and reduced lunch rate. With 50 students per square mile, this district is considered urban for the purposes of this study.¹⁰ The borrowing power of the school district to build new buildings in 1994 was \$10,098 per student, with a total borrowing power of \$89,540,000.¹¹

School Building 2 is located in an isolated rural school district with a total K-12 enrollment of 259 students in 1993-94, a 65-percent free and reduced lunch rate, and four students per square mile. The school district borrowing power for facilities was \$5,051 per student, with a total school facilities debt limit of \$1,308,125.

Located on the school district grounds are a secondary school (7-12 grade range), an elementary school, and a building that houses the cafeteria and the gymnasium. The original high school building was built in 1907, burned, and was rebuilt in 1915. The second building burned in 1930. The outside stone structure of the 1930 building survived the fire and the inside was rebuilt during the same year. Therefore, the present high school building is about 70 years old. The science class and lab are located in the basement of the high school, which the students affectionately refer to as the "dungeon." This area floods frequently with heavy rains. The science lab equipment consists of 22 microscopes and a fish tank. The halls above the basement have nails for coats and the building has no air conditioning. In 1996, the high school set up a computer lab with used computers and black and white monitors, but a majority of the computers became unusable when the room became too hot and the computers overheated. By 1998, the computer lab sat idle except for limited training on keyboarding. During the summer of 1997, the school acquired two new heating units that stand nakedly in the main hallway with ducts going into the classrooms. The one set of restrooms for the high school students is attached to the outside of the building, making it necessary for the students to go out of the building to get to the restrooms. The building is in need of repairs from the floor to the ceiling. School 2 is

located in the same county as the \$8 million middle school.

School 3 is located in a rural school district that had a total K-12 enrollment of 1,078 in 1993-94, a free and reduced lunch rate of 50 percent, and 7.4 students per square mile. The school district borrowing power for facilities was \$5,155 per student, with a school district total debt limit of \$5,557,357. A major topic of discussion at this school is the district's new Information and Communication Center located in a new addition to the high school/middle school building. With 36,000 square feet, the addition was constructed for a cost of \$3.5 million. This facility houses four computer labs, 12 classrooms, a 500-seat school/community auditorium with a grand piano, a conference room, and a 12,000-square-foot media center. The whole complex has been wired and prepared for the latest technology. The building was designed so that the computer labs are open for adult classes and community use.

All K-12 classrooms have access to distance learning, as well as a computer, phone, fax, TV, VCR, Dukane multimedia retrieval system, CD-ROM tower, and the Internet. Over 90 percent of the faculty and staff have active user accounts with Internet access. The high school and middle school students have accounts as well, with over 1,300 students soon to be on-line. The Information and Communications Center offers more than 16 different services and has three satellites, local television cable, live video capabilities, and digital satellite systems, as well as remote controls in every classroom. Soon distance education will be provided from this site.

The center is used by students, staff, parents, and the community. From 1990-1998, the school district grew from having six computers and four phone lines to having more than 400 networked computers and its own phone system. Grant writing, pilots, and community involvement in passing a tax increase provided funding for the new facility and equipment. Seventy percent of the community voted for a millage increase to fund the building. The philosophy of the school district is expressed in its motto: "Education is the business of the whole community."

These examples present three school districts with three very different school facility conditions. All three school districts are located within the same county. One has a new \$8 million dollar state-of-the art middle school; one has a new state-of-the-art Information

and Communication Center and a new 500-seat school/community auditorium; and a third has computers that smoked and burned due to the lack of climate control in the high school building, student restrooms that are only accessible from the outside of the building, and a facility that is in great need of repair and maintenance.

How does such great disparity in the quality of school buildings happen in the same county? In the same state? Local property values, local incomes, leadership, and community involvement are some of the major reasons. Each school district provides facilities funding according to its ability to borrow money, which is tied to local property values. In 1998, the state provided a total of \$10 million for facilities funding, but remember that the one new middle school cost \$8 million. If you divide \$10 million across 312 school districts and over 400,000 students, you can see a great problem: too little for too many.

Another problem is school size. The two rural school districts used as examples had about the same borrowing power for school facilities: about \$5,000 per student. But the total amount of borrowing power is a different story. Compare the borrowing power to fund school facilities of the two rural school districts with the nonrural district: \$1.3 million for the rural, sparsely populated school district, \$5.5 million for the other rural school district, and \$89.5 million for the urban district. Of course, the two rural school districts will not have the number of buildings that are required to house the students in the nonrural, larger school district, and will not require the same amount of total revenue for facilities funding. Yet, size presents a problem relative to the needs of a school district's facilities funding.

School Facilities Funding and School District Size

In 1993-94, the relationship between school facilities funding and school district size in Arkansas was very strong ($r = .94$). This means that as the size of the school district increased, the amount of funds available for school buildings increased. The measure of school facilities funding, or the amount that the school district could borrow with approval of the local community for local school facilities, was based on 22 percent of a school district's assessed property value. It should be pointed out that two school districts can have equal borrowing power per student (i.e., \$7,000 per student), but it is the

total borrowing amount that becomes significant as a school district assesses its ability to build and repair buildings.

There is little relationship between borrowing power for school facilities and expenditure per pupil ($r = .14$). There is also little relationship between total borrowing power and borrowing power per pupil ($r = .26$)¹². Size factors showed the strongest correlation with borrowing power. The number of certified staff, number of students, and number of students per square mile all show a high correlation to borrowing power (see Table 2.3). Borrowing power is inversely related to the percentage of students receiving free or reduced lunch.

Table 2.3
Bivariate Correlations among Key Variables
in the State of Arkansas

	Borrowing Power
Number of certified staff	.93
Number of students	.94
Number of students per square mile	.74
Percentage of students receiving free or reduced lunch	-.16

Table 2.4 compares the five school districts ranked highest with the five districts ranked lowest on school facilities borrowing power. This table shows a dramatic difference in district resources available for school facilities funding in Arkansas. Borrowing power per student does not appear to be the best measure of comparison for school facilities funding, when one considers the *total* cost of a school building or that school building repairs can amount to millions of dollars.

Table 2.4 also reveals an interesting relationship between school size, rurality, and poverty, and their effects on school borrowing power. The lowest ranking school districts in Table 2.4 are rural and poor, as indicated by the low number of students per square mile and the high percentage of free and reduced lunch participation. As indicated earlier, the expenditure per pupil has very little relationship to school facilities funding. State policies mandate that school facilities funding in Arkansas is measured and obtained from local

Table 2.4
School District Borrowing Power
Five Lowest and Five Highest Ranked School Districts
Arkansas 1993-94

Rank	Total Borrowing Power	Borrowing Power Per Student	Number of Students	Percent Free & Reduced Lunch	Number of Students Per Square Mile	Expenditure Per Pupil
1	\$530,939	\$4,871	109	76	1.1	\$5,330
2	\$664,054	\$7,461	89	79	0.6	\$5,492
3	\$736,358	\$3,188	231	85	2.1	\$3,875
4	\$753,429	\$5,057	149	73	1.1	\$4,571
5	\$990,677	\$5,726	173	61	5.6	\$3,280
LOWEST						
1	\$94,160,000	\$10,864	8,667	28	33.6	\$3,058
2	\$94,160,000	\$17,827	5,282	28	55.0	\$3,200
3	\$150,700,000	\$12,207	12,345	36	190.0	\$3,556
4	\$162,140,000	\$7,952	20,390	39	28.0	\$4,274
5	\$363,000,000	\$15,303	23,721	49	224.0	\$5,084
HIGHEST						

property wealth. The resident ability to pay is not a factor in the state measure of a school district's capacity to fund school buildings.

In examining the borrowing power for facilities funding per pupil in Table 2.4, you will find that one of the lowest and one of highest ranking school districts have about the same borrowing power per student: \$7,461 and \$7,952 respectively. In comparing these two school districts, the lowest ranked district has 89 students with 78 percent free and reduced lunch rate and the highest ranked has 20,390 students with 39 percent free and reduced lunch rate. This finding illustrates two very important points. First, it is not the amount of funding per pupil that is important, but rather the total amount of funds available to a district. How many school buildings can a school district build and how many repairs can be made with \$664,000 compared to \$162 million? Second, this way of calculating borrowing power per student says nothing about a district's ability to levy taxes to pay for school facility building or renovation. How hard will it be for the local school district with 78 percent free and reduced lunch rate to support increased property taxes to pay a bond issue to cover the amount borrowed for school facilities? Compare this situation to that of the district with a lower free and reduced lunch participation rate.

When facilities funding is based on local property wealth and local ability to pay, great inequities will occur. Because of the way school funding is structured, rural districts often have three counts against them: lower total enrollment, lower property values, and a lower ability to support property taxes. One way to address this inequity in school facilities funding is for the state to recognize local wealth and local ability to pay and to equalize funds accordingly. A second way is federal assistance. Both of these funding methods would go a long way toward remedying the inequalities experienced by rural districts.

Rural Areas and Facilities Funding

In order to examine rural areas and facilities funding more closely, this section analyzes the 312 school districts in Arkansas. For this purpose, the 312 school districts in Arkansas were categorized by levels of ruralness and by levels of borrowing power for school facilities funding. An explanation of the levels of each category are as follows:

1. **Ruralness.** The five levels of ruralness are measured by students per square mile. Levels I and II represent the most rural school districts. Each school district was assigned a level:

Levels of Rurality:

- Level Rural I = 0.5 - 5.0 students per square mile
- Level Rural II = 5.1 - 10.0 students per square mile
- Level Rural III = 10.1 - 20.0 students per square mile
- Level Rural IV = 20.1 - 40.0 students per square mile
- Level Rural V = 40.1 - 300.0 students per square mile

2. **Borrowing power for school facilities by quartiles.** The 312 school districts were ranked from high to low on borrowing power for school facilities and divided into quartiles with each quartile containing 78 school districts. Quartile A contains the school districts with the least borrowing power for school facilities funding.

Levels of Borrowing Power for School Facilities by Quartiles:

- A = Less than \$2.6 million in borrowing power
- B = Greater than \$2.6 million but less than \$4.8 million
- C = Greater than \$4.8 million but less than \$10 million
- D = Greater than \$10 million in borrowing power

Table 2.5 presents the number of school districts and the number of students by each category of borrowing power and level of ruralness. In relationship to ruralness, it is interesting to note that the most rural school districts, those with fewer than 10 students per square mile, are found in all four levels of borrowing power. As noted in Table 2.5, 76 school districts have fewer than 10 students per square mile and less than \$2.6 million in borrowing power for school facilities. An additional 63 school districts have fewer than 10 students per square mile and between \$2.6 million and \$4.8 million in borrowing power. In total, 75 percent, or 234 of the 312 school districts in Arkansas have fewer than 10 students per square mile. The diversity in the borrowing power for school facilities for these 234 rural school districts ranges from \$531,000 to over \$10 million. The total student enrollment of 171,480 in the 234 rural school districts represents 38.6 percent of the total state public school population. The rural school districts, as measured by 10 students or less per square mile, represent

Table 2.5
Ruralness and Facilities Funding
1993-94 Arkansas

Quartile	Rural I 0.5-5.0 Students per Square Mile	Rural II 5.1 - 10.0 Students per Square Mile	Rural III 10.1 - 20.0 Students per Square Mile	Rural IV 20.1 - 40.0 Students per Square Mile	Rural V 40.1 - 300 Students per Square Mile	Total
A—Less than \$2.6 million borrowing power	60 school districts 18,496 students	16 school districts 7,019 students	2 school districts 1,021 students	0	0	78 school districts 26,536 students
B—Between \$2.6 and \$4.8 million borrowing power (greater than or equal to 2.6M, less than 4.8M)	41 school districts 21,252 students	22 school districts 16,438 students	13 school districts 9,434 students	2 school districts 2,097 students	0	78 school districts 49,221 students
C—Between \$4.8 and \$10 million borrowing power (greater than or equal to 4.8M, less than or equal to 10M)	39 school districts 31,584 students	29 school districts 30,399 students	9 school districts 12,486 students	1 school district 1,264 students	0	78 school districts 75,733 students
D—Greater than \$10 million borrowing power	12 school districts 16,008 students	15 school districts 30,284 students	18 school districts 50,673 students	18 school districts 88,856 students	15 school districts 106,914 students	78 school districts 292,735 students
Total	152 school districts 87,340 students	82 school districts 84,140 students	42 school districts 73,614 students	21 school districts 92,217 students	15 school districts 106,914 students	312 school districts 444,225 students

75 percent of the states' school districts and 39 percent of the student enrollment.

A total of 95 school districts are located in the four cells of Quartiles C and D and in RI and RII. This indicates that 40 percent of the rural school districts have borrowing power for school facilities funding ranging from \$4.8 million to \$10 million or more. Among the 234 rural school districts in Arkansas there is great diversity in the amount of funds that are available for school facilities funding. This illustrates, once again, that each school district's capacity for funding facilities is dependent upon property wealth, resident ability to pay, and school district size.

There is also great diversity in the number of students in each school district, the percentage of students receiving free and reduced lunch by quartile, and the borrowing power for school facilities funding, as shown in Table 2.6. The importance of this table is that it shows the great differences in districts' abilities to fund facilities and residents' ability to pay.

Table 2.6
Diversity in School Size, Resident Ability to Pay,
Ruralness, and Funding Facilities by Quartiles

Borrowing Power Quartile	Number of Students (Range)	Percentage Free & Reduced Lunch (Range)	Students per Square Mile (Range)
A—Less than \$2.6 million borrowing power	89 - 851	20 - 94	0.5 - 18
B—Between \$2.6 and \$4.8 million borrowing power (greater than or equal to 2.6M, less than 4.8M)	225 - 1,381	19 - 100	1.2 - 30
C—Between \$4.8 and \$10 million borrowing power (greater than or equal to 4.8M, less than or equal to 10M)	163 - 2,021	14 - 94	1.2 - 38
D—Greater than \$10 million borrowing power	641 - 23,721	16 - 87	1.2 - 303

Note: Each quartile contains 78 school districts.

Summary and Conclusion

Across the nation, rural school districts face three main challenges in school facilities funding. First is the problem of school district size. Most rural school districts are small and serve only a small number of students. This tends to affect the total amount of funds they have available for construction or renovation, regardless of their borrowing power per student. Second, rural school districts are more likely to have lower assessed property values and therefore a lower ability to locally support school facilities funding. Third, rural districts are less likely to have the resident ability to support local taxes. Across the nation, many rural school districts have very high poverty levels and high percentages of children who qualify for free and reduced lunch. Regardless of the local assessed property valuation, many rural communities do not have the ability to tax themselves at a level that would support new facility construction or renovation.

Not all rural schools face the problems mentioned above. However, rural schools have a higher probability of facing at least one problem. Should they have two of the problems to contend with, such as small school size and low property wealth, a small school district can face an insurmountable challenge to facilities funding, especially if there is no state or federal aid.

The state of school facilities funding in Arkansas provides a good illustration of the problems that are found in many other states. In Arkansas, the amount of money that can be borrowed for school facilities funding ranges from \$530,939 for a small, rural school district with 109 enrollment to \$363 million for a school district with 23,721 enrollment. In facility funding per student, the largest school district has three times the amount of money the smallest rural school district has for school buildings and repairs. School size and local wealth work against a small school district when the state does not equalize school facilities funding. In the above example, the small rural school district had 78 percent of their students participating in the free and reduced lunch program, an indication of low resident ability to support additional taxes for facilities funding.

The diversity among the 312 school districts in Arkansas is great. Just among the 234 rural school districts, the borrowing power for school facilities funding ranges from \$531,000 to over \$10 million, the percentage of students qualifying for free and reduced lunch ranges

from 18 percent to 93 percent, and school size ranges from 89 to 3,709 students. State and federal aid policies for school facilities funding would have to include evaluations of each school district's size, local wealth, and resident ability to pay to establish an equitable solution to the problem of school facilities funding.

Education is a state responsibility. The education process is affected by the quality of the school facility. Many states have had to address equity issues in relation to expenditures per pupil and equal educational opportunity. The same equity issues should be raised in relation to school facilities funding. The quality of education, including the quality of the local school building, should not be dependent upon the wealth of the local community. In 1993-94, 15 states provided no state school facilities funding. Eight of those states measured local fiscal capacity by assessed property valuations. Arkansas was one of the eight states that depended on local wealth for the quality of school buildings. As illustrated above, in Arkansas there is great diversity in the quality of local school facilities and the ability of local communities to support school facilities. Unless school funding is equalized through state or federal policy solutions, the disparities seen in Arkansas will only continue across the nation.

Notes

1. *Brown v. Board of Education of Topeka*, 347 US 483, 74 (S.Ct. 686 1954), and Barr and Jordan, "Financing Public Elementary and Secondary School Facilities," 251-52.
2. Johns, Morphet, and Alexander, *The Economics and Financing of Education*, 277-89.
3. *Ibid.*, 228.
4. *Ibid.*, 275.
5. Gold, Smith, and Lawton, eds., *Public School Finance Programs*.
6. *Ibid.*, 25.
7. Hughes, *Fair Share Dilemma*, 36-37.
8. Arkansas Department of Education, *Arkansas School Facilities Needs Assessment Report*.
9. *Ibid.* According to D. Cecil McDermott of Instructional Microcomputer Projects for Arkansas Classrooms (MPAC), Arkansas ranks ninth in the nation in student-per-computer ratio.

10. School districts with 10 students or less per square mile are considered "rural" for this study. Districts with more than 10 students per square mile are considered urban.
11. School district borrowing power or debt limit for school facilities is computed as 22 percent of assessed property value. Property is assessed at 18 to 22 percent of market value. The school district can borrow up to 22 percent of the assessed property value of the school district area.
12. The number of students in each school district is measured by the number of students in Average Daily Matriculation (ADM) per year.

References

- Arkansas Department of Education. *Arkansas School Facilities Needs Assessment Report*. Little Rock: Arkansas Department of Education, School Plant Services, 1996.
- Barr, W. Monfort, and K. Forbis Jordan. "Financing Public Elementary and Secondary School Facilities." In *Planning to Finance Education*, edited by Roe L. Johns, Kern Alexander, and K. Forbis Jordan. Gainesville, FL: National Educational Finance Project, 1971.
- Gold, Steven D., David M. Smith, and Stephen B. Lawton, eds. *Public School Finance Programs of the United States and Canada, 1993-94*. 2 vols. Albany, NY: Center for the Study of the States, 1995.
- Hughes, Mary F. *The Fair Share Dilemma: Property Wealth, Per Pupil Revenue and Resident Ability to Support Public Elementary and Secondary Education in West Virginia, 1991-92*. Charleston, WV: Education Policy Research Institute, West Virginia Education Fund, 1992. ERIC Document Reproduction Service No. ED 356 119.
- Johns, Roe L., Edgar L. Morphet, and Kern Alexander. *The Economics and Financing of Education*. 4th ed. Englewood Cliffs, NJ: Prentice-Hall, 1983.